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CLAIM AMENDMENTS

Claims 1-27 are currently pending in the application.

Please cancel claims 1-27 without prejudice or disclaimer to the subject matter of claims 1-27.

Please add new claims 28- as shown below.

The following listing of claims 1-27 will replace all prior versions, and listings, of claims in the application:

1.-27. (Cancelled)

28. (New) A method of controlling an operation of a switched-reluctance motor including a rotor having a rotor pole and a stator having a stator pole, said method comprising:

aligning the rotor pole and the stator pole in response to a reception of an actuation command; and

subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position.

29. (New) The method of claim 28, further comprising:

rotating the rotor to the holding position upon an expiration of the predetermined time period.

30. (New) The method of claim 29, further comprising:

minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

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31. (New) The method of claim 29, further comprising:
minimizing any heating losses of the switched-reluctance motor subsequent to
rotating the rotor to the holding position.

32. (New) A method for controlling an alignment of a rotor pole and a stator pole of
a switched-reluctance motor, said method comprising:
identifying a first phase of the motor as a target phase defining an initial position
of the rotor pole that corresponds to the alignment of the rotor pole and the stator pole;
and
subsequent to identifying the first phase of the motor as the target phase,
exclusively exciting a second phase of the motor and the first phase of the motor in a
sequential manner to thereby rotate the rotor pole to the initial position, the second phase
being adjacent the first phase.

33. (New) A method for controlling an alignment of a rotor pole of a
switched-reluctance motor to a target position between a first phase of the motor and a
second phase of the motor, said method comprising:
aligning the first phase of the motor to thereby align the rotor pole to a stator pole
adjacent the target position; and
subsequent to aligning the first phase of the motor, concurrently exciting a third
phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the
target position.

34. (New) A method for controlling a rotation of a rotor of a switched-reluctance
motor in a desired direction from a pre-alignment position, said method comprising:
cyclically exciting a plurality of phases of the switched-reluctance motor in a
sequential manner to thereby crank the rotor in the desired direction from the pre-
alignment position; and

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subsequent to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

35. (New) A method for controlling a minimization of any heat losses by a switched-reluctance motor having a rotor in a holding position, said method comprising:

rotating the rotor from a pre-alignment position to the holding position; and
dithering the rotor upon the rotor being in the holding position for a predetermined time period.

36. (New) A method for controlling a minimization of any current losses by a switched-reluctance motor having a rotor in a holding position, said method comprising:

rotating the rotor from a pre-alignment position to the holding position; and
subsequent to rotating the rotor from a pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.

37. (New) A device of controlling an operation of a switched-reluctance motor including a rotor having a rotor pole and a stator having a stator pole, said device comprising:

means for aligning the rotor pole and the stator pole in response to a reception of an actuation command; and

means for, subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position.

38. (New) The device of claim 37, further comprising:

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means for rotating the rotor to the holding position upon an expiration of the predetermined time period.

39. (New) The device of claim 38, further comprising:
means for minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.
40. (New) The device of claim 38, further comprising:
means for minimizing any heating losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.
41. (New) A device for controlling an alignment of a rotor pole and a stator pole of a switched-reluctance motor, said device comprising:
means for identifying a first phase of the motor as a target phase defining an initial position of the rotor pole that corresponds to the alignment of the rotor pole and the stator pole; and
means for, subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase.
42. (New) A device for controlling an alignment of a rotor pole of a switched-reluctance motor to a target position between a first phase of the motor and a second phase of the motor, said device comprising:
means for aligning the first phase of the motor to thereby align the rotor pole to a stator pole adjacent the target position; and

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means for, subsequently to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position.

43. (New) A device for controlling a rotation of a rotor of a switched-reluctance motor in a desired direction from a pre-alignment position, said device comprising:

means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from the pre-alignment position; and

means for, subsequently to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

44. (New) A device for controlling a minimization of any heat losses by a switched-reluctance motor having a rotor in a holding position, said device comprising:

means for rotating the rotor from a pre-alignment position to the holding position; and

means for dithering the rotor upon the rotor being in the holding position for a predetermined time period.

45. (New) A device for controlling a minimization of any current losses by a switched-reluctance motor having a rotor in a holding position, said device comprising:

means for rotating the rotor from a pre-alignment position to the holding position; and

means for, subsequent to rotating the rotor from the pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.

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46. (New) A system, comprising:
a switched-reluctance motor including
a rotor having a rotor pole, and
a stator having a stator pole;
means for aligning the rotor pole and the stator pole in response to a reception of an actuation command; and
means for, subsequent to the aligning of the rotor pole and the stator pole, preliminarily cranking the rotor in a direction as dictated by the actuation command for a predetermined time period to thereby facilitate a subsequent rotation of the rotor to a holding position.

47. (New) The system of claim 37, further comprising:
means for rotating the rotor to the holding position upon an expiration of the predetermined time period.

48. (New) The system of claim 47, further comprising:
means for minimizing any current losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

49. (New) The system of claim 47, further comprising:
means for minimizing any heating losses of the switched-reluctance motor subsequent to rotating the rotor to the holding position.

50. (New) A system, comprising:
a switched-reluctance motor including
a rotor having a rotor pole, and
a stator having a stator pole;

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means for identifying a first phase of the motor as a target phase defining an initial position of the rotor pole that corresponds to the alignment of the rotor pole and the stator pole; and

means for, subsequent to identifying the first phase of the motor as the target phase, exclusively exciting a second phase of the motor and the first phase of the motor in a sequential manner to thereby rotate the rotor pole to the initial position, the second phase being adjacent the first phase.

51. (New) A system, comprising:

a switched-reluctance motor including

a rotor having a rotor pole, and

a stator having a stator pole;

means for aligning a first phase of the motor to thereby align the rotor pole to the stator pole adjacent a target position between a first phase of the motor and a second phase of the motor; and

means for, subsequently to aligning the first phase of the motor, concurrently exciting a third phase of the motor and a fourth phase of the motor to thereby align the rotor pole to the target position.

52. (New) A system, comprising:

a switched-reluctance motor including a rotor;

means for cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner to thereby crank the rotor in the desired direction from a pre-alignment position; and

means for, subsequently to cyclically exciting a plurality of phases of the switched-reluctance motor in a sequential manner, rotating the rotor in the desired direction to a holding position.

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53. (New) A system, comprising:
a switched-reluctance motor including a rotor;
means for rotating the rotor from a pre-alignment position to a holding position;
and
means for dithering the rotor upon the rotor being in the holding position for a predetermined time period.

54. (New) A system, comprising:
a switched-reluctance motor including a rotor;
means for rotating the rotor from a pre-alignment position to a holding position;
and
means for, subsequent to rotating the rotor from the pre-alignment position to the holding position, reducing an ampere level of a phase current corresponding to the holding position as a function of a motor torque corresponding to the holding position.